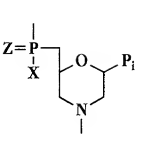


Fig. 1A

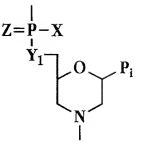


Fig. 1B

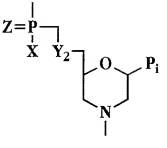


Fig. 1C

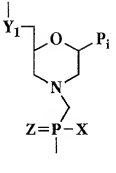


Fig. 1D

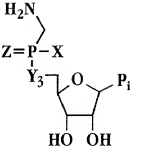


Fig. 1E

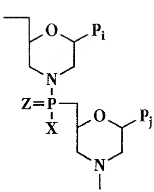


Fig. 2A-A

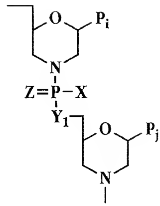


Fig. 2B-B

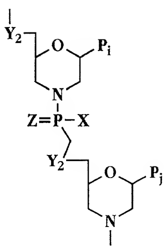


Fig. 2C-C

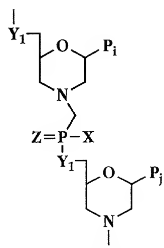


Fig. 2D-D/E-E

TGCAACTCCCCGTAGCAGCG charged
ACGTTGAGGGGCATCGTCGC uncharged

TGCAACTCCCCGTAGCAGCG charged
ACGTTGAGGGGCATCGTC uncharged

TGACAACTCCCCGTAGCAGCG charged
ACGTTGAGGGGCATCG uncharged

TGCAACTCCCCGTAGCAGCG charged
ACGTTGAGGGGCAT uncharged

TGCAACTCCCCGTAGCAGCG charged
GTTGAGGGGCAT uncharged

TGCAACTCCCCGTAGCAGCG charged
TGAGGGGCATCGTCGC uncharged

Fig. 3

```
        CCCGTAGCAGCGNNNN   charged
ACGTTGAGGGGCATCGTCGC       uncharged

        CCCGTAGCAGCGNNNN   charged
ACGTTGAGGGGCATCGTC         uncharged

        CCCGTAGCAGCGNNNN   charged
ACGTTGAGGGGCATCG           uncharged
```

[NNNN is optional]

Fig. 4A

```
          CCGTAGCAGC       charged
ACGTTGAGGGGCATCGTCGC       uncharged

              C-
              /\
          CCGTAGAGC        charged
ACGTTGAGGGGCATCTCGC        uncharged
```

Fig. 4B

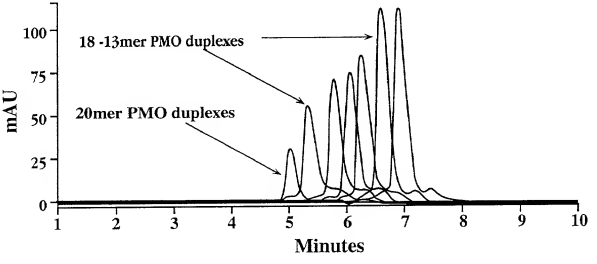

18 -13mer PMO duplexes
20mer PMO duplexes
mAU
100
75
50
25
0
1
2
3
4
5
6
7
8
9
10
Minutes

Fig. 5A

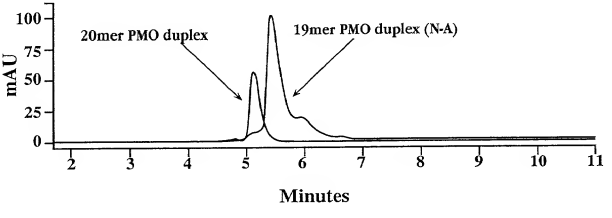

20mer PMO duplex
19mer PMO duplex (N-A)
mAU
100
75
50
25
0
2
3
4
5
6
7
8
9
10
11
Minutes

Fig. 5B

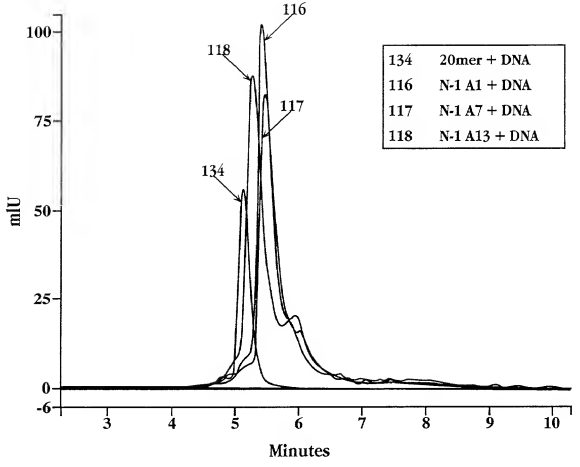


Fig. 6

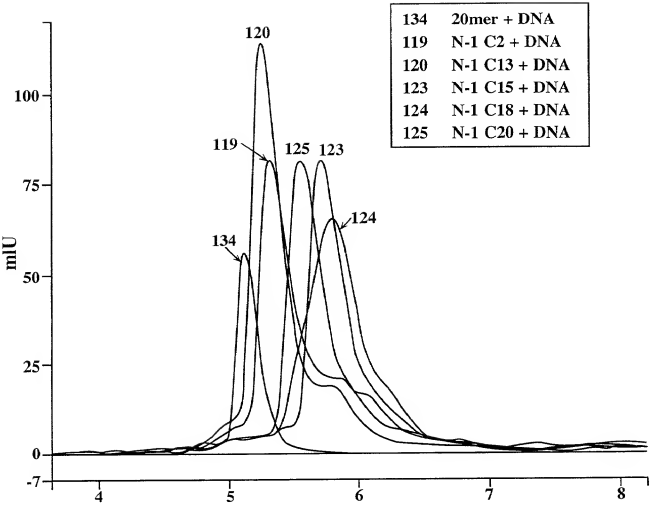

134 20mer + DNA
119 N-1 C2 + DNA
120 N-1 C13 + DNA
123 N-1 C15 + DNA
124 N-1 C18 + DNA
125 N-1 C20 + DNA
120
119
125
123
124
134
mIU
100
75
50
25
0
-7
4
5
6
7
8

Fig. 7

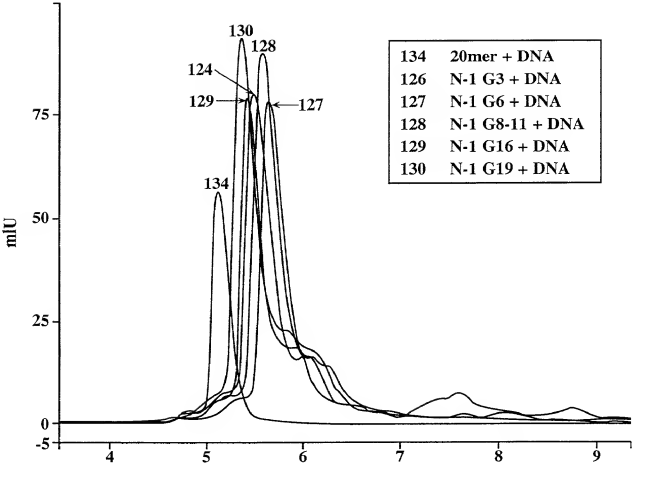

130
128
124
129
127
134
75
50
25
0
-5
mIU
4
5
6
7
8
9
134 20mer + DNA
126 N-1 G3 + DNA
127 N-1 G6 + DNA
128 N-1 G8-11 + DNA
129 N-1 G16 + DNA
130 N-1 G19 + DNA

Fig. 8

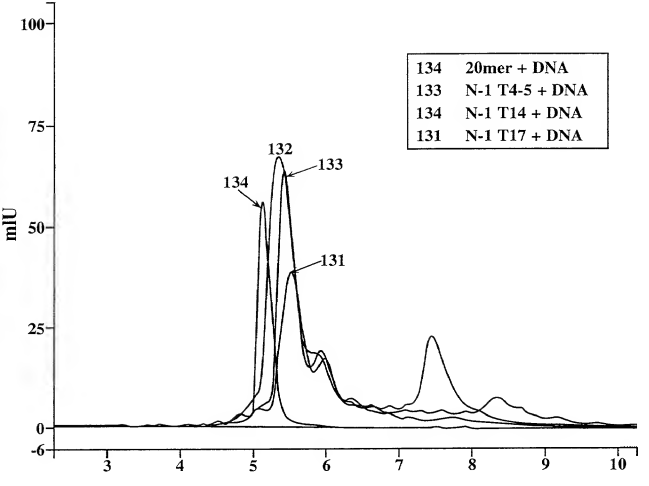


Fig. 9

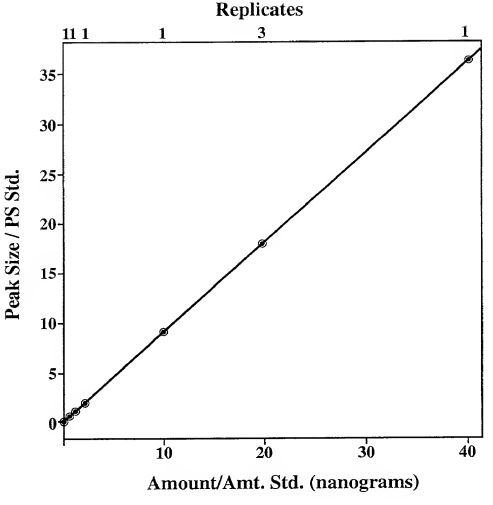
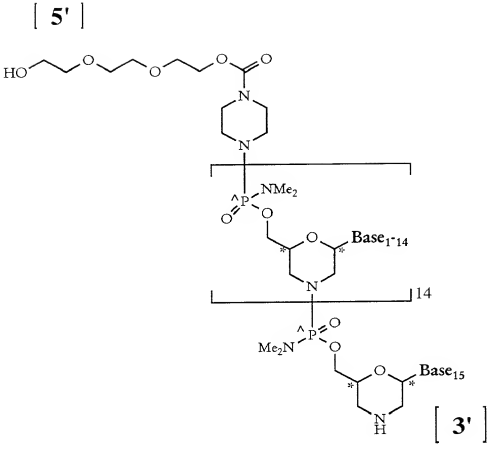

Replicates
11 1
1
3
1
35
30
25
20
15
10
5
0
Peak Size / PS Std.
10
20
30
40
Amount/Amt. Std. (nanograms)

Fig. 10



$Base_{1-15}$ = GAGGGGCATCGTCGC (5' ⟶ 3')

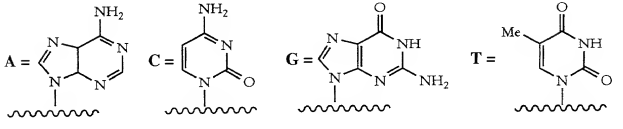


Fig. 11

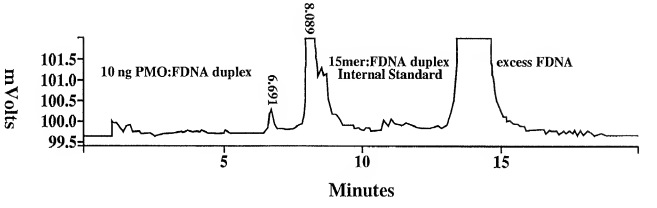


Fig. 12